

## CLAIMS

What is claimed is:

1           1.     A method for accelerating a motor vehicle having a multiple  
2 torque source engine in order to simulate the acceleration of a motor vehicle with  
3 a relatively larger single torque source engine; the multiple torque source engine  
4 including a first torque source and a second torque source each providing a  
5 torque output, the method comprising:

6                 determining an acceleration request;

7                 comparing the acceleration request to a data store of target torque  
8 outputs associated with torque output from the single torque source engine;

9                 selecting a target torque output based on the acceleration request;

10                increasing the torque output of the first torque source to the target  
11 torque output if the first torque source can meet the target torque output, thereby  
12 simulating the single torque source engine; and

13                increasing the combined torque output of the first and second  
14 torque sources to the target torque output if the first torque source cannot meet  
15 the target torque output, thereby simulating the single torque source engine.

1           2.     The method of claim 1, wherein determining an acceleration  
2 request includes reading an accelerator position sensor to determine an  
3 accelerator position and translating the accelerator position into the acceleration  
4 request.

1                   3.     The method of claim 1, wherein the data store contains a list  
2 of acceleration requests matched with target torque outputs, the target torque  
3 outputs identical to the torque outputs of the single torque source engine due to  
4 various acceleration requests.

1                   4.     The method of claim 1, wherein increasing the combined  
2 torque output of the first and second torque sources includes initializing and  
3 synchronizing the second torque source to the first torque source.